

Exercise	Date	Location	# Layed IAW System Specs	# Recovered, SCORED, and/or GT Survey	Minimum Value of Items Recovered	MK														Other (not listed)	# Targets Recovered Beyond System Specs	Notes:
						MK - 62/82	16 Tail	MK - 63/83	12 Tail	MK-65	MK-56	MK-55	MK-52	MK-44	MK-46	Moored MK-53	MK-51	Moored MK-49				
	96BS10	2/26/10 - 3/7/10	San Clemente Island, CA	30	30	\$300,000	30													3	(3) MK62 had pinger attached but not sounding	
	340WBS10A	2/26/10 - 3/7/10	San Clemente Island, CA	38	39	\$390,000	37					1								3	(2) MK62 had pinger attached but not sounding, (1) MK62 had not pinger attached, (3) missing MK65 not at intended and no pinger sounding	
Ship Layed	King Fisher	2/26/10 - 3/7/10	San Clemente Island, CA	6	6	\$60,000												6			(1) K-4 missing	
Truck transport SD to PC, Airlift PC to SD	ANMS Location and Recovery Operation	3/30/10 - 4/3/10	Panama City, FL	1	1	\$150,000													1		MK5 system located ANMS unit, ROV recovered	
Ship Layed	Bay Shield 2010	05/17/10 - 5/19/10	San Diego, CA	8	8																	
Ship Layed	RIMPAC COMSUBPAC Range Maintenance	7/24/10 - 8/17/10	Penguin Banks, Kauai, Barking Sands		64	\$640,000						11	11	13	9	11	9					
Ship Layed	USS Abe Lincoln C2X	7/24/10 - 8/17/10	Kaho'olawe Range, HI		15	\$150,000											15					
		8/12/10 - 8/14/10	San Clemente Island, CA	7	7	\$70,000	7															
Ship Layed	King Fisher	8/12/10 - 8/14/10	San Clemente Island, CA	1	1	\$10,000												1				
Spawar 86	Mk4 Range Maintenance	10/16/10	Alpha Field, CA	10	10	\$100,000												10				
Acoustic Explorer	Tanner Banks SCORE field	11/3- 6/20/2010	Tanner Banks	30	30	\$300,000							13		2			15	1 beacon		targets were surveyed	
Surveyor	CSFTP CSG MINEX	11/15- 17/2010	San Clemente Island, CA	8	8	\$80,000	8															
Surveyor	King Fisher	11/17/10	San Clemente Island, CA	1	1	\$10,000												1				
Surveyor	King Fisher	02/15/11	San Clemente Island, CA	7	7	\$70,000												7				
Surveyor	RRG JTFEX	02/14- 17/2011	San Clemente Island, CA	12	12	\$120,000			12											4	pingers not pinging	
Surveyor	340 WPS	03/14- 19/2011	San Clemente Island, CA	56	56	\$560,000	54			2										22	Targets were not stenciled, only general location was given, and most pingers were not installed	
Spawar 86	Mk4 Range Maintenance	04/05/11	Alpha Field, CA	10	10	\$100,000												10				
Surveyor	20BS ISO JCS JTFEX	06/13- 17/2011	San Clemente Island, CA	8	8	\$80,000	8															
Surveyor	CVW-9 CTX	06/02/11	San Clemente Island, CA	5	5	\$50,000																
Surveyor	King Fisher	06/03/11	San Clemente Island, CA		8	\$80,000															8 targets replanted and surveyed	
RSC-1	Imperial Beach SCORE field	08/11/11	Imperial Beach, CA	24	24	\$240,000							2	4	5	2		1	10(5)	5	5 moored targets broke lose, only anchors were recovered	
Surveyor	340 WPS	08/25/11	San Clemente Island, CA	10	10	\$100,000	8			2										51	22 pingers were installed only 10 of those were working	
RSC-1	77 BS	11/16-22/11	San Clemente Island, CA	3	9	\$90,000	9													6	only 3 pingers attached	
RSC-1	Imperial Beach SCORE field	03/26-29/12	Imperial Beach, CA	0	50	\$400,000	46		4											50	no pingers were provided	
Surveyor	340 WPS	08/25/11	San Clemente Island, CA	10	10	\$116,000	8			2											22 pingers were installed only 10 of those were working	
Spawar 86	340WPS	3/26/12 - 3/29/12	San Clemente Island, CA	0	51	\$408,000	47		4											52	All targets scored but not recovered. Recovered with RSC-1 along with 77WPS Score on 4-10 June 2012	
Spawar 86	Mk4 Range Maintenance	4/3/12 - 4/4/12	Alpha Field, CA	9	9	\$55,800												9				
RSC-1	MCM-EX COMOMAG	4/14/12 - 4/16/12	Imperial Beach, CA	14	14	\$113,800								2				4	8			
RSC-1	77 WPS	6/4/12- 6/10/12	San Clemente Island, CA	13	24	\$372,000	14			10												
WRB-101	RIMPAC	7/26/12- 7/31/12	PMRF, Kauai, HI	3	26	\$208,000	26													23		
Navajo	RIMPAC	8/4/12- 8/8/12	Pearl Harbor, HI	0	12	\$62,580			3					6	3					12		
RSC-1	RIMPAC	8/6/12- 8/28/12	San Diego, CA	0	73	\$476,368			4				15		20	15	4		4	11	73	
RSC-1	Trident Warrior	08/29/12	Camp Pendleton, CA	0	6	\$17,502											6			6		
RSC-1	340WPS/ Kingfisher	9/4/12- 9/10/12	San Clemente Island, CA	8	66	\$591,000	53		4	4								5		61		

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						MK - 62/82	16 Tail	MK - 63/83	12 Tail	MK-65	MK-56	MK-55	MK-52	MK-44	MK-46	Moored MK-53	MK-51	Moored MK-49	Other (not listed)		
RSC-1	Tanner Banks / Kingfisher	9/17/12-9/20/12	Tanner Banks/ SCI, CA	0	16	\$99,200												16		16	
SPAWAR 86	MK4 Range Maintenance	11/5/12 - 11/7/12	Alpha Field, San Diego, CA	0	12	\$85,800												9	3	12	Recovered 2 Anchors with cables and 1 PD
RSC-1	CTX/JTFEX	11/13/12-11/18/12	San Clemente Island, CA	14	33	\$264,000	22		11											19	20 pingers recovered(14 working). 15 assets unrecovered due to insufficient position data. 1 unrecoverable. 1 old target recovered.
RSC-1	77WPS	11/29/2012-12/2/2012	San Clemente Island, CA	14	36	\$432,000	28			8										22	
RSC-1	Imperial Beach SCORE field	03/19/2013-03/28/2013	Imperial Beach, CA	0	18	\$141,720						1	2	6	2		2	5		7	11 targets video surveyed. 3 targets were unrecovered due to insufficient position data. Dives were conducted on 17 incorrect waypoints for these targets.
SPAWAR 20	69th BS	4/2/2013-4/6/2013	San Clemente Island, CA	2	15	\$120,000	15														15 of 18 targets scored but not recovered. 3 targets jettisoned and not found. No pingers were heard. Recovery will be with RSC-1 along with 77WPS in Aug
SPAWAR 86	MK4 Range Maintenance	05/8/13 - 05/10/13	Alpha Field, San Diego, CA	0	11	\$75,800												9	2	12	
RSC-1	MCMEX 13	05/20/13	Imperial Beach, CA	6	6	\$37,200												6			4 targets were FIO bouys with flashing lights
SPAWAR 20	77WPS	5/23/13 - 5/28/13	San Clemente Island, CA	1	15	\$232,000		14		1	4										GT video of (14) MK16s and (1) MK12 conducted on 24-25 May. Only one pinger detected. No 56s found. MK12 is from CTX/JTFEX13.
RSC-1	Dawn Blitz13	6/23/13 - 6/29/13	Port Hueneme / Camp Pendleton, CA	22	45	\$329,880									6	8		10	21		45 of 65 recovered. Positions were bad due to ship movement and improper placement. 11 targets upside down.
USNS APACHE	VACAPES13/ Dawn Blitz13	7/9/2013 - 7/19/2013	Little Creek, VA	19	19	\$127,020									3	2		9	5		4 targets were FIO bouys with UIED. 5 targets were flooded or anchor only.
SPAWAR 86	MK4 Range Maintenance	7/15/2013 - 7/16/2013	Alpha Field, San Diego, CA	6	6	\$41,000												5	1		1 anchor only from target that had broken free.
RSC-1	P3/69BS/77W PS/CTX/ JTFEX	8/19/2013 - 8/24/2013	San Clemente Island, CA	3	36	\$494,000	11	13		1	11									33	1 Mk16 attachment point covered by chute. 1 Mk65 tailsection still attached pinging. 4 Mk62s not found, overgrown in rocks and kelp. 1 Mk12 recovered from CTX/JTFEX13, 1255yds from splash point.
RSC-1	EXP MINEX	08/26/13	Camp Pendleton, CA		5	\$1,730,600													5	5	Pulled 5 VEMS. Replanted 3. Other not listed: (2)- Mk75s(313K ea), (3)- Mk74s(556K ea)
RSC-1	EXP MINEX	9/3/2013 - 9/4/2013	Camp Pendleton, CA		22	\$5,347,002								4		6		17		22	Other not listed: (6)- Mk75s(313K ea), (6)- Mk74s(556K ea), (5)- Mk57s(19.5K ea)
SPAWAR 20	MK4 Range Maintenance	09/05/13	Alpha Field, San Diego, CA		1	\$6,200												1		1	RVM with Duck stuck on cable.
SPAWAR 20	UUV/Seaweed	09/18/13	Imperial Beach, CA	4	5	\$33,100								1				3	1		Recovered 3 MK49 in UUV field. 1 cable snapped during re-lay of field. Recovered anchor and end of day. Recovered 1 of 7 Mk44s from Seaweed. No recovery vessel avail.
SPAWAR 86	MK4 Range Maintenance	10/03/13	Alpha Field, San Diego, CA		2	\$12,400												2		2	
RSC-1	Tanner Banks	10/28/13-10/31/13	Tanner Banks	0	31	\$236,500						13		3				15		22	Recovered 14 37" moored spheres and replaced with 15 Mk49s. Recovered and relocated 6 bottom targets to new locations and
RSC-1	EXPMINEX / LOE3	10/31/13-11/1/13	Camp Pendleton, CA	0	10	\$74,200								4				1	5		surveyed LOE3 field bottom targets after the drop.
RSC-1	EXPMINEX / LOE3	11/25/13-11/26/13	Camp Pendleton, CA	18	18	\$123,800								4				9	5		Recovery of LOE3 field. 1 Mk25 dropped short of desired location. Unable to locate after 30 dives. Moored 4 Mk53s and 5 Mk49s. Other 2 Mk25s and 3 Mk36s.
SPAWAR 20	MK7 Range Maintenance	01/31/14	Charlie field, San Diego, CA	1	1	\$25,000													1		PD
SPAWAR 87	MK7	02/04/14	Charlie field, San Diego, CA		1	\$4,000													1		Mk7 DUCK baseplate
SPAWAR 86	UUV / IB	02/10/14	Imperial Beach, CA	3	3	\$18,600												3			
SPAWAR 87	MK7	03/04/14	Charlie field, San Diego, CA		1	\$25,000													1		Recovered Mk7 YB PD can.
SPAWAR 86	UUV / IB	03/20/14	Imperial Beach, CA		1	\$6,200												1			Recovered moored target that a UUV was entangled in.
RSC-1	CVW17 / 28BS / 340WPS	3/24/14-3/30/14	San Clemente Island, CA	31	82	\$710,000	70	8	1	3											10 working pingers
RSC-1	UUV / IB(RIMPAC12)	4/15/2014 - 4/16/2014	Imperial Beach, CA	19	19	\$144,637						1	2	6	2	1	2	5			1 Mk53 on bottom vertical without anchor
RSC-1	CVW17 / 28BS / 340WPS	4/21/14-4/25/14	San Clemente Island, CA	15	29	\$250,000	10	15	3	1											no working pingers
SPAWAR 86	COMSUBPAC Range Maintenance	5/19/14-5/21/14	Alpha Field, San Diego, CA	12	12	\$74,400												12			
SPAWAR 87	UUV	05/22/14	Alpha Field, San Diego, CA	1	1	\$1,000													1		UUV beacon
RSC-1	CTX / JTFEX 14	6/23/14-6/26/14	San Clemente Island, CA	23	30	\$276,000		28		2											2 targets unrecoverable due to parachute covering attachment point. 1 target unrecoverable due to married lines separating during recovery.

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RSC-1	RIMPAC	7/8/14-02/20/15	San Diego, CA	70	70	\$7,459,285							8		8	15	5		5	29	Other not listed: (10)- Mk74s(556K ea), (5)- Mk75s(313K ea), (11)- Mk25/36s, (3)- Mk50s
SPAWAR 87	MK7	08/14/14	Charlie field, San Diego, CA		1	\$25,000													1		Recovered Mk7 YB PD can.
USNS GRAPPLE	VACAPES14/AMNS	8/25/14 - 9/02/14	Little Creek, VA	19	20	\$123,670					6			1		10			3		3 targets were MK36s.
SPAWAR 86	UUV / IB	9/4/14 - 9/22/14	Imperial Beach, CA	8	8	\$49,600												8			
SPAWAR 87	MK7	09/16/14	Charlie field, San Diego, CA		1	\$4,000													1		Recovered Mk7 YB
SPAWAR 86	COMSUBPAC Range Maintenance	9/29/14-9/30/14	Alpha Field, San Diego, CA	4	4	\$14,951										3		1			
RSC-1	340WPS	10/06/14-10/09/14	San Clemente Island, CA		54	\$432,000	52		2												
USNS CATAWBA	IMCMEX14	11/10/14-11/25/14	Manama, Bahrain	37	37	\$259,501							12			3	13		9		Other not listed: (9) MK25s
RSC-1	28BS/Kingfisher	12/15/14-12/17/14	San Clemente Island, CA	12	19	\$135,800		10										9			
SPAWAR 86	COMSUBPAC Range Maintenance	12/22/14	Alpha Field, San Diego, CA	4	4	\$14,951										3		1			
SPAWAR 86	UUV / IB	12/29/14	Imperial Beach, CA	5	5	\$31,000												5			
RSC-1	SCORE / IB	02/23/15	Imperial Beach, CA	20	20	\$175,328							4	4	1	4	3	4			
RSC-1	340WPS	3/16/15-3/21/15	San Clemente Island, CA	81	81	\$684,000	71		8	2											
USS Champion (MCM-4)	ULT-15	4/13/2015-4/16/2015	Imperial Beach, CA	2	2	\$562,200												1	1		Other not listed: (1) MK 74 (\$556,000)
RSC-1	CVW-9	4/20/15-4/22/15	San Clemente Island, CA	7	12	\$96,000		12											5		16 total dropped. 4 working pingers
SPAWAR 86	Range Maintenance	05/12/15	Alpha Field, San Diego, CA	4	4	\$40,000												4			Other not listed: (2) PDM3, (2) PD
RSC-1	CVW-2	7/13/15-7/15/15	San Clemente Island, CA	8	19	\$168,000		17	2										11		
RSC-1	Tanner Bank	7/16/15-7/17/15	Tanner Bank	29	29	\$318,000						12		2				15	0		
SPAWAR 87	UUV	07/23/15	Imperial Beach, CA	1	1	\$100,000												1			Flooded 6" Dia. UUV
SPAWAR 20	UUV	08/18/15	Imperial Beach, CA	1	1	\$100,000												1			Experimental sensor
RSC-1	340WPS/96BS	8/31/15-9/3/15	San Clemente Island, CA	61	65	\$646,000	55	0	3	0	7	0	0	0	0	0	0	0	0	3	(2) Mk62 and (1) Mk63 recovered from previous mission. (1) Mk62 unrecoverable with bail against rock. (1) Mk65 unrecoverable with tail still attached.
SPAWAR 86	UUV / IB	9/1/15 - 9/3/15	Imperial Beach, CA	8	8	\$49,600												8			
SPAWAR 86	UUV / IB	09/09/15	Imperial Beach, CA	3	3	\$18,600										0	0	3			
SPAWAR 86	COMSUBPAC Range Maintenance	09/10/15	Alpha Field, San Diego, CA	3	3	\$30,000										0		0	3		(3) RVMs
Acoustic Explorer	UUV / IB	09/29/15	Imperial Beach, CA	12	12	\$35,004										12	0	0			
RSC-1	NUWC POTR project	10/15/15	San Clemente Island, CA	1	1	\$35,000												1			POTR sensor
RSC-1	Vigilant Shield 2016	11/13/2015-11/19/2015	Imperial Beach / Seal Beach, CA	30	30	\$2,898,000						6		4				1	19		Other not listed: (4)- Mk74s(556K ea), (1)- Mk75s(313K ea), (8)- Mk51/36s(15K ea), (2)- Mk25s(18K ea), (4)- Mk57s(19.5K ea), MK49 anchor only(1K ea)
SPAWAR 86	Range Maintenance	11/23/15	Alpha Field, San Diego, CA	4	4	\$40,000												4			Other not listed: (2) PDM3, (2) PD
RSC-1	340WPS	3/14/2016-3/18/2016	San Clemente Island, CA	57	57	\$528,000	53			4											(4) Mk63s unrecoverable (video w/o MMS recovery gear) (1) Mk65 not found (pinger not working)
RSC-1	SCORE / IB	4/05/16-4/07/16	Imperial Beach, CA	21	20	\$163,548							4	3	3	4	2	4			(1) Mk51s attachment is on the ground. SL are distracted by the line between the lugs and are unsuccessful at hooking up. (1) Mk51 and (1) Mk44 not found.
Acoustic Explorer	PC HFWB	4/13/16-4/14/16	Imperial Beach, CA	33	33	\$83,837							1	2	2	1	1	1	25		Other not listed: (25) similar to Mk45.
SPAWAR 86	UUV IB Range Maintenance	05/09/16	Imperial Beach, CA	10	10	\$41,800								5	5			0			

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SPAWAR 86	Range Maintenance	05/23/16	Alpha Field, San Diego, CA	3	3	\$30,000													3		Other not listed: (2) PDM3, (1) PD
USNS CATAWBA	IMCMEX16	4/26/16-5/23/16	Manama, Bahrain	59	59	\$611,500	12					22	5	9	0	0	11		0		
SPAWAR 86	UUV IB Range Maintenance	05/09/16	Imperial Beach, CA	6	6	\$37,200								0	0			6	0		
SPAWAR 86	Range Maintenance	05/23/16	Alpha Field, San Diego, CA	4	4	\$24,800												4	0		
RSC-1	9/37BS	8/01/16-8/05/16	San Clemente Island, CA	71	86	\$718,000	79		1	3											6 targets scored but unrecoverable due to fouled attachments
RSC-1	RIMPAC16	7/15/16-9/12/17	San Diego, CA	70	70	\$3,643,517				4		18	12			1	7	18	5		Other not listed: (5)- Mk74s(556K ea)
RSC-1	RIMPAC16	10/03/16-10/06/16	San Clemente Island, CA	13	13	\$176,000			4				8								(1) Mk62 unrecoverable- bail is overgrown.
RSC-1	340WPS	10/03/16-10/06/16	San Clemente Island, CA	12	27	\$176,000	22														videod (4) Mk63s w/12 tails with no MMS recovery bar. (1) Mk62 unrecoverable with bail against the rocks.
SPAWAR 86	UUV IB Range Maintenance	10/06/16	Imperial Beach, CA	6	6	\$25,080								3	3						
RSC-1	CTX	11/15/16-11/17/16	San Clemente Island, CA	23	21	\$168,000		21													2 targets unrecoverable due to weather. 2 targets without pingers not found.
SPAWAR 86	Range Maintenance	11/28/16	Alpha Field, San Diego, CA	4	4	\$40,000													4		Other not listed: (2) PDM3, (2) PD
SPAWAR 86	Range Maintenance	12/7/2016-12/12/2016	Alpha Field, San Diego, CA	14	14	\$98,200												11	3		Other not listed: (3) RVM
RSC-1	9th BS	1/9/2017-1/15/2017	San Clemente Island, CA	45	45	\$425,000	40			5											
SPAWAR 86	Range Maintenance	03/14/17	Alpha Field, San Diego, CA	4	4	\$27,860								2	1		1				
SPAWAR 86	UUV IB Range Maintenance	04/05/17	Imperial Beach, CA	3	3	\$18,600												3			
RSC-1	CTX 9BS	05/08/17	San Clemente Island	46	53	\$496,000	49			4										7	
SPAWAR 86	Range Maintenance	5/31/2017-6/1/2017	Alpha /UUV IB Fields, San Diego, CA	15	15	\$115,800												9	6		other not listed: (2) PDM3, (3) RVM, (1) MO8
SPAWAR 86	Range Maintenance	06/07/17	Alpha Field, San Diego, CA	1	1	\$10,000													1		Other not listed: (1) PD
SPAWAR 86	Code 56	07/10/17	San Diego, CA	3	3	\$30,000													3		Other not listed: (3) Sea Lion Anchors attached to Code 56 equipment.
RSC-1	Tanner Banks Range maintenance	7/17/2017-7/20/2017	Tanner Banks	29	29	\$318,000							12	2				15			One MK-44 not at location provided
M/V Merlin	HTS testing	8/14/2017-8/15/2017	San Diego, CA	14	14	\$7,532,009													14		Other not listed: (13)- Mk74s(556K ea), (1)- Mk75s(313K ea).
M/V Merlin	HTS testing	8/15/2017-8/16/2017	San Diego, CA	4	4	\$69,000						3					1				(1) MK36 recovered, same value as MK51s. (2) MK25 recovered, same value as MK55s.
RSC-1	CTX17 & 20th BS	8/28/17-8/31/17	San Clemente Island, CA	18	42	\$232,000	29														MULTIPLE TARGETS W/O ATTACHMENTS OR PINGERS. GREATER THAN %50 LAYED OUTSIDE OF SYSTEM SPECS.
SPAWAR 86	Range Maintenance	11/7/17-11/9/17	Alpha /UUV IB Fields, San Diego, CA	14	14	\$95,860									1			10	3		other not listed: (3) RVM
SPAWAR 86	Range Maintenance	11/20/17	UUV IB Field, San Diego, CA	1	1	\$6,200												1			
SPAWAR 86	Range Maintenance	11/27/17	Alpha Field, San Diego, CA	4	4	\$40,000													4		Other not listed: (2) PDM3, (2) PD
SPAWAR 86	Range Maintenance	01/04/18	UUV Field, San Diego, CA	4	4	\$17,360									3	1					
SPAWAR 86	Range Maintenance	03/05/18	UUV Field, San Diego, CA	9	9	\$37,940								5	4						
SPAWAR 86	Range Maintenance	03/21/18	UUV Field, San Diego, CA	5	5	\$42,400												2	3		other not listed: (3) RVM
SPAWAR 86	Range Maintenance	04/16/18	UUV Field, San Diego, CA	8	8	\$34,080								5	3						
SPAWAR 86	Range Maintenance	05/08/18	Alpha Field, San Diego, CA	5	5	\$27,580	2								3						

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